2.0 PROPOSED ACTION AND ALTERNATIVES

This chapter describes the proposed action and alternatives considered for the Telegraph Street project based on the established project Purpose and Need. The purpose of the proposed action has been determined as Improve Safety, Relieve Traffic Congestion and Increase Capacity, and Enhance the Community; this determination was based on the identified needs of Mill Creek Bridge Deficiencies (D-416), Roadway Capacity and Demand, Access Management, Community Enhancement, and Roadway Deficiencies. In accordance with the guidelines of Federal Highway Administration (FHWA) Technical Advisory T 6640.8a, the No Action (No Build), Transportation System Management (TSM), and Build alternatives have been considered.

A specific mass transit alternative was not developed for this proposed action, because it would not meet the project's Purpose and Need. A mass transit alternative would have only been considered from 500 West to 300 East along Telegraph Street. A mass transit alternative for such a small area of Washington City would not help to relieve congestion in the area and, thus, it would not meet the proposed project's Purpose and Need. Several of the Build alternatives create a wider road, with more travel lanes, and greater vehicle capacity. There could be future projects along Telegraph Street that would involve specific mass transit alternatives that would be accommodated by a road with more travel lanes.

A project team that included representatives from the Utah Department of Transportation (UDOT) and Washington City directed the alternatives development and screening process. Representatives of the project team met regularly from the project start in the winter of 2005 to summer 2006 to develop and evaluate project alternatives.

In addition to the continued involvement of Washington City, UDOT, and FHWA, the general public has been involved in the alternatives development process. Through public information meetings, legal notices, a web site, and public letters/comments, the public has had the opportunity to learn about and provide input relating to the proposed action. A list of meetings held as part of the public involvement process for this project is included in Chapter 6.0. Additionally, coordination with resource and regulatory agencies has been performed to help identify critical corridor issues and to develop concepts that would meet agency standards. Comments from the public and the resource and regulatory agencies have been incorporated into the alternatives development and evaluation process.

2.1 Proposed Action

The proposed action calls for improvements to Telegraph Street from 500 West to 300 East in Washington City. Improvements would include widening from a three-lane section to a five-lane section consisting of four travel lanes and a center turn lane to match each end of the corridor. The center turn lane may be a raised median with landscaping along some portions of the road. The improvements would also include

replacing the Mill Creek Bridge to accommodate the expanded roadway section. One alternative includes creating a one-way couplet incorporating Telegraph Street and 100 South. Improvements to sidewalks and parkstrips would also be provided for in the alternatives. Other opportunities for corridor beautification, in addition to parkstrips, have been identified by Washington City and would be accommodated to the extent practicable in the proposed project.

2.2 Independent Utility and Logical Termini

Federal law (23 CFR 771.111(f)) requires that each transportation project evaluated in a National Environmental Policy Act (NEPA) document:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope
- Have independent utility or independent significance
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements

The logical termini of the proposed action are 500 West and 300 East along Telegraph Street in Washington City. These are the logical termini because Telegraph Street outside of this area is already a five-lane roadway consisting of four travel lanes and a center turn lane. The roadway outside of the proposed project limits already meets the Purpose and Need of this proposed project.

To satisfy current and expected functional needs for this segment of Telegraph Street and meet future needs determined in the 2005 Washington City Transportation Master Plan (TMP), a facility that can convey projected traffic volumes of 29,000 vehicles per day is required.

2.3 Description of Alternatives

A range of alternatives was developed and evaluated for the proposed action. The initial list of alternatives was not constrained by mode, ability to meet the Purpose and Need, or cost. The intent was to begin with a broad list of specific and independent actions that could be evaluated using accepted engineering design criteria and factors representing potential environmental constraints in the project study corridor. The alternatives developed by the project team for evaluation and screening are described in the following sections.

2.3.1 Alternative One

Alternative One (**Figure 2.1**) would improve the corridor's continuity by widening Telegraph Street to a 95-foot right-of-way (ROW) section and matching the lane configuration to that which already exists west of 500 West and east of 300 East . From

500 West to 200 West, widening of the road would be symmetrical about the road centerline and designed to align with the current road west of the 500 West and Telegraph Street intersection. From 200 West to Main Street, widening of the road would be shifted to the north by 29 feet from the current centerline in order to minimize impacts to historic properties. From Main Street to 300 East, the widening of the road would be shifted 29 feet to the south from the current roadway centerline in order to minimize impacts to historic properties. **Figure 2.1** uses yellow directional arrows to show the direction of the shift in roadway alignment throughout the corridor. The roadway widening would be designed to meet the needs identified in the 2005 Washington City TMP and the proposed project Purpose and Need.

The proposed roadway would include two lanes in each direction and a center turn lane or a raised median with landscaping**.** The raised medians would be installed from approximately 450 West to 250 West, 150 West through the 100 West intersection to approximately 50 West, and from 150 East through the 200 East intersection to 250 East. The location of the medians would be the same for all of the Build alternatives. **Figure 2.7** is an aerial view showing the median locations that would be typical for all the Build alternatives.

Figure 2.2 shows the typical roadway cross-section for the planned improvements in Alternative One, including:

- 1-foot ROW outside of sidewalks
- 5-foot sidewalks and 4-foot parkstrips on both sides of the roadway
- 2½-foot curb and gutter section on both sides of the roadway
- 4-foot shoulders on both sides of the roadway
- Four 12-foot travel lanes
- 14-foot raised median or center turn lane

Alternative One addresses the need for the proposed action by providing improved functionality, safety, capacity, and access in the project study area. It also addresses traffic congestion by increasing capacity through roadway widening and additional lanes for larger traffic volumes. The signalized intersections for this alternative would operate at a LOS D or better in the year 2030. Pedestrian safety is addressed by maintaining a 5-foot sidewalk along Telegraph Street and adding a 4-foot parkstrip with landscaping. Reconstruction of sidewalks would also address the absence of Americans with Disabilities Act (ADA)-compliant pedestrian access. The parkstrip would provide a visual improvement to enhance the community and also offer an increased measure of safety for pedestrians.

2.3.1.1 Alternative One – Narrow Option

The project team developed the Narrow Option under Alternative One (**Figure 2.3**) to provide an alternative that would have less impact on ROW and fewer resulting potential

relocations. These adjustments to Alternative One would decrease the total width of the roadway by 10 feet to 85 feet. The typical roadway cross-section for the Narrow Option (**Figure 2.4**) would include:

- 5-foot sidewalks and 4-foot parkstrips on both sides of the roadway
- 2½-foot curb and gutter section on both sides of the roadway
- 2-foot shoulders on both sides of the roadway
- Four 11-foot travel lanes
- 14-foot raised median or center turn lane

The Narrow Option would require the same shifts to the north and south to protect historic properties as Alternative One (**Figure 2.1**)**.** This option would decrease the amount of new ROW needed, decrease the number of potential business and residential relocations, minimize the impacts to 4(f) properties, and reduce the overall cost of Alternative One.

2.3.2 Alternative Two

Alternative Two (**Figure 2.5**) also calls for widening and improvements to Telegraph Street from 500 West to 300 East. This alternative would improve the continuity of the corridor by widening Telegraph Street to a 95-foot ROW throughout the corridor. From 500 West to 200 West, the radius of the curve would be increased, necessitating a shift of the roadway to the south by a maximum of 12 feet from the current centerline. From 200 West to 300 East, the roadway would be shifted 29 feet to the north from the current roadway centerline. **Figure 2.5** shows the shift in the roadway alignment using yellow directional arrows throughout the corridor. By shifting the new wider road to the north, the Alternative Two design would minimizes impacts to some historic properties while creating other potential business and residential relocations. The roadway width would be increased to meet the needs identified in the 2005 Washington City TMP and the proposed action Purpose and Need.

The proposed roadway would include two lanes in each direction with a center turn lane or raised median with landscaping. The median locations would be the same as those described under Alternative One (Section 2.3.1).

Figure 2.2 shows the typical roadway cross-section for the planned improvements in Alternative Two, including the following:

- 1-foot ROW on inside of sidewalk
- 5-foot sidewalks and 4-foot parkstrips on both sides of the roadway
- 2½-foot curb and gutter section on both sides of the roadway
- 4-foot shoulders on both sides of the roadway
- Four 12-foot travel lanes
- 14-foot raised median or center turn lane

Alternative Two addresses the need for this proposed action by providing improved functionality, safety, capacity, and access in the project study area. It also addresses traffic congestion by increasing capacity through roadway widening and additional lanes for larger traffic volumes. The signalized intersections for this alternative would operate at a LOS D or better in the year 2030. Pedestrian safety is addressed by maintaining a 5-foot sidewalk along Telegraph Street and adding a 4-foot parkstrip with landscaping. Reconstruction of sidewalks would also address the absence of ADA-compliant pedestrian access. The parkstrip would provide a visual improvement to enhance the community and also offer an increased measure of safety for pedestrians.

2.3.2.1 Alternative Two – Narrow Option

The Narrow Option under Alternative Two (**Figure 2.6**) would decrease the width of through lanes, the center turn lane, and the shoulder of the roadway. These adjustments would decrease the total width of the roadway by 10 feet to 85 feet. The adjustments would have less impact on ROW and fewer resulting potential relocations than the standard cross section. A typical roadway cross-section for the Narrow Option is shown in **Figure 2.4**.

This option would decrease the amount of ROW required from that required for the standard width option. Reducing the amount of ROW required would decrease the number of potential business and residential relocations, minimize the impacts to some 4(f), and reduce the overall cost of Alternative Two.

2.3.3 Alternative Three – Narrow

Alternative Three (**Figure 2.7**) was developed using the narrow typical section only. This alternative would have the same typical cross-section as Alternatives One – Narrow and Two – Narrow (**Figure 2.4**). The alignment from the intersection of Telegraph Street and 500 West to the 200 West intersection would be the same as Alternative Two – Narrow, which means it would be shifted to the south . From 200 West to about ½ block west of Main Street the roadway alignment would also be the same as Alternative Two – Narrow and would be shifted to the north. From just west of Main Street to the intersection of Main the alignment of the road would be shifted to the south. As Telegraph Street passes through the intersection at Main Street the alignment of the road would start to shift to the north once again. At about 50 East the road is centered on the existing roadway and continues to be centered on the existing roadway until the end of the Project Area (300 East). The shifts in road alignment are shown on **Figure 2.7** using yellow arrows.

Alternative Three – Narrow would satisfy the proposed action Purpose and Need. The signalized intersections would operate at a LOS D or better in the year 2030. Sidewalks would be reconstructed and widened to 5 feet to make them ADA-compliant and safer for pedestrians and people with disabilities. Four-foot parkstrips would also be included in

the roadway design. The overall goal of Alternative Three – Narrow is to reduce the amount of potential relocations that would be required, thereby reducing overall cost.

2.3.4 Alternative Four

Alternative Four (**Figure 2.8**) would create a one-way couplet. Westbound traffic would travel along Telegraph Street, and eastbound traffic would travel along 100 South. A roundabout would be built at the intersection of 300 East and 100 South to facilitate this traffic flow. Improvements and some widening would be made to Telegraph Street from 500 West to 300 East and 100 South from 500 West to 300 East in Washington City.

The proposed roadway would include two lanes on Telegraph Street and 100 South and left-turn and right-turn pockets where needed. The roadway design would also include the construction of a new section of road between 500 West and 200 West that would split the traffic on Telegraph Street to shift eastbound traffic to 100 South. This new section of road would require a new bridge crossing over Mill Creek.

This alternative was developed as a way to avoid potential relocations of businesses or residences along Telegraph Street, and also as a way to keep Telegraph Street at it's current width.

2.3.4.1 Alternative Four – Option A

Option A (**Figure 2.9**) would shift the roundabout 200 feet to the east from 300 East and 100 South to 200 East and 100 South. Moving the roundabout to the west would allow two-way traffic on 100 South between 200 East and 300 East. The section of Telegraph Street from 200 East to 300 East would be designed as a four-lane road with a center turn lane. Moving the roundabout would also reduce the amount of traffic traveling north along 300 East between 100 South and Telegraph Street. Eastbound traffic wanting to travel south on 300 East would remain on 100 South and turn right at the intersection of 100 South and 300 East.

2.3.4.2 Alternative Four – Option B

Option B (**Figure 2.10**) calls for a traffic signal at the intersection of 300 East and 100 South instead of a roundabout. The resulting T-intersection would reduce the number of potential relocations required to construct a roundabout. The lane configuration would remain the same as the base Alternative Four.

2.3.4.3 Alternative Four – Option C

Option C (**Figure 2.11**) combines elements of Alternative Two – Narrow Option, Alternative Four, and new features unique to this option. It proposes a one-way couplet

that would use Telegraph Street and 100 South, but would not require the construction of a new road section from Telegraph Street to 100 South across Mill Creek. Instead, the one-way couplet would start at 200 West. 200 West would remain a two-way street; however, there would be two lanes for southbound traffic and one lane for northbound traffic. Between its intersections with 200 West and 300 East, 100 South would be one-way. At 300 East, a T-intersection similar to Option B would be constructed, and 300 East would remain a two-way street.

The goal of Option C is to minimize the potential impacts to Mill Creek that would result from construction of a new bridge just south of Telegraph Street required under the other options to connect the road with 100 South. Option C would avoid creating a new crossing over Mill Creek, thus minimizing impacts to natural resources in the creek, including wetlands and wildlife. This option would also decrease the overall cost of Alternative Four by eliminating the need to design and build a new section of road.

2.3.5 No Build Alternative

Under the No Build alternative, Telegraph Street between 500 West and 300 East would remain in its current condition. Standard maintenance would still occur, but there would be no additional improvements through widening or addition of community enhancements. The characteristics of the No Build alternative include:

- The continuity between segments of Telegraph Street from I-15 through Washington City would continue as it is today.
- Service levels at most intersections would decline to LOS F by the year 2030.
- Safety would most likely decline as congestion increases, with an expected increase in accident rates.
- Pedestrian access ramps would not be added or reconstructed and the sidewalk width would remain between 4 and 5 feet.
- The Mill Creek bridge would not be redesigned/rebuilt to comply with current AASHTO standards and would remain “functionally obsolete.”

The No Build alternative does not meet the proposed project’s Purpose and Need because the existing roadway a) does not adequately accommodate existing traffic levels in certain areas, b) would not adequately accommodate future projected levels of traffic at any of the major intersections within the project study area, and c) would result in a considerable increase in travel times. In addition, the No Build alternative does not address safety issues arising from inconsistent lane configurations, poor stopping sight distance, shoulder width inconsistencies, intersection sight distance, pedestrian accommodations, and bridge deficiencies. Although the No Build alternative does not meet the proposed project’s Purpose and Need, its evaluation is required by NEPA and UDOT regulations. Accordingly, it will be carried forward for use as a baseline for evaluation of potential proposed action impacts.

2.4 Screening of Project Alternatives

2.4.1 Introduction

In a meeting held on July 26, 2006 the Stakeholder Committee (Refer to Section 6.3.1) and the project team met to discuss screening of alternatives. The purpose of the screening process was to evaluate the four Build alternatives (including options) and the No Build alternative to determine a) which alternatives would be advanced for further analysis in the EA and b) establish the basis for identifying a preferred alternative. The following screening criteria were presented and discussed:

1. Purpose and Need
    a. Improve safety
    b. Increase capacity
    c. Enhance the community
2. Impacts to historic buildings and properties along Telegraph Street
3. Impacts to Nisson Park
4. Relocations (Residential and Commercial)
5. Right-of-way acquisition (Residential and Commercial – Including historic)
6. Project Cost

Following discussion by the committee, it was decided to include impacts to wetlands in the screening criteria. It was also agreed that staff would develop the specific criteria for wetlands and include them in the updated screening process for this EA. The committee also decided that project cost would not be included in the screening process.

Staff presented a table that displayed the criteria and the four project alternatives (including options). The table included both quantitative numbers (number, acres, and cost) and preliminary ratings that were more qualitative in nature (Purpose and Need). This section describes the screening process conducted by the Stakeholder Committee at the July, 2006 meeting and the additional refinements to the screening process made by URS and agency staff following that meeting.

The Build alternatives and the No Build alternative were assessed for each of the screening criteria using a uniform rating scale of 1 through 5. A rating of 1 indicates the alternative rated the lowest in achieving the Purpose and Need or in minimizing impacts to a given resource screening criteria. A rating of 5 indicated that an alternative rated the highest in achieving the screening criteria. The following sections describe the rating system for each criterion, as well as how the ratings were used to evaluate the proposed project alternatives.

2.4.2 Purpose and Need

To assess consistency of the alternatives with the project Purpose and Need, the following criteria were selected:

1. Improved safety
2. Increased capacity
3. Enhancement of the community

In order to qualitatively rate the first three criteria, the Stakeholder Committee and project team decided that alternatives would be rated on a scale of 1 to 5. A rating of 1 would indicate the alternative does not satisfy the individual Purpose and Need criterion, while a rating of 5 would indicate the highest level of consistency with the criterion. Because the criteria were qualitative and also subjective, the group determined the ratings by consensus following discussion of the positive and negative features of each alternative. The results of the evaluation are summarized in **Table 2.1.**

Table 2.1 - Consistency with Purpose and Need

Alternative	Improve Safety	Increase Capacity	Enhance Community	Total Rating
No Build	1	1	1	3
One	4	4	3	11
One-Narrow	3.5	4	4	11.5
Two	4	4	3	11
Two-Narrow	3.5	4	4	11.5
Three-Narrow	3.5	4	5	12.5
Four	2	4	1	7
Four – Option A	2	4	1	7
Four – Option B	2	4	1	7
Four – Option C	2	4	1	7

2.4.3 Impacts to Willard O. Nisson Park

Impacts to Nisson Park were evaluated based on the amount of acres of park that would be converted to roadway use under each alternative. The northern portion of the park has about 400 feet of frontage along Telegraph Street. At the July, 2006 meeting, the Stakeholder Committee and project team determined that the park and park amenities would not be significantly impacted if up to 0.25 acres were acquired as ROW for the road widening. This was considered by the group to be acceptable because a) the park was developed in anticipation of improvements to SR-212, and b) park amenities were set back sufficiently to minimize potential impacts by a widened Telegraph Street. This

amount of ROW would represent 6.25 percent of the park area. Using 0.25 acres as the threshold for impacts to the park, the following rating scale was developed:

1 More than 0.4 acres would be impacted
2 From 0.36 to 0.40 acres would be impacted
3 From 0.31 to 0.35 acres would be impacted
4 From 0.25 to 0.30 acres would be impacted
5 From 0.0 to 0.25 acres would be impacted

The results of the evaluation are summarized in **Table 2.2.**

Table 2.2 - Impacts to Willard O. Nisson Park

Alternative	Impacts to Nisson Park (Acres)	Rating
No Build	0.00	5
One	0.02	5
One – Narrow	0.00	5
Two	0.11	5
Two – Narrow	0.07	5
Three – Narrow	0.15	5
Four	0.33	3
Four – Option A	0.33	3
Four – Option B	0.33	3
Four – Option C	0.17	5

2.4.4 Potential Business and Residential Building Relocation

At the July, 2006 meeting, the Stakeholder Committee and project team reviewed estimates of the number of potential relocations by alternative. Potential relocations were displayed for residences, businesses and historic buildings. The group discussed the estimates and weighed the differences among the project alternatives. The Stakeholder Committee did not assign ratings and agreed that staff would complete the screening process for relocations.

Potential relocations of business or residential buildings were rated on a scale of 1 to 5 based on the total number of potential building relocations required for the alternative.

Historical buildings were evaluated separately and the results of that screening are described in Section 2.4.7. The following rating scale was developed:

1 6 to 8 potential relocations
2 4 to 5 potential relocations
3 3 potential relocations
4 1 to 2 potential relocations
5 No potential relocations

The results of the evaluation are summarized in **Table 2.3.**

Table 2.3 – Potential Business and Residential Building Relocations

Alternative	Potential Relocations			Rating
	Residential	Business	Total	
No Build	0	0	0	5
One	3	6	9	1
One – Narrow	1	2	3	3
Two	1	4	5	2
Two – Narrow	1	2	3	3
Three – Narrow	1	2	3	3
Four	6	1	7	1
Four – Option A	3	2	5	2
Four – Option B	2	1	3	3
Four – Option C	3	1	4	2

2.4.5 Right-of-Way Impacts

At the July, 2006 meeting, the Stakeholder Committee and project team reviewed estimates of the number of acres of right-of-way (ROW) required for each alternative. The ROW estimates were displayed for residences and businesses. The group discussed the estimates and weighed the differences among the project alternatives. The Stakeholder Committee did not assign ratings and agreed that staff would complete the screening process for ROW impacts.

The final screening analysis of ROW impacts was based on a threshold for significant impacts of 1.5 acres. The alternatives were assigned a rating of 1 to 5 based on the following scale:

1 Requires more than 1.5 acres of ROW
2 Requires 1 to 1.5 acres of ROW
3 Requires 0.5 to 1 acres of ROW
4 Requires up to 0.5 acres of ROW
5 Requires no ROW

The results of the evaluation are summarized in **Table 2.4.**

Table 2.4 - Right-of-Way Impacts

Alternative	Right-of-Way (Acres)			Rating
	Residential	Business	Total	
No Build	0.00	0.00	0.00	5
One	0.37	1.19	1.56	1
One – Narrow	0.33	1.02	1.35	2
Two	0.60	1.21	1.81	1
Two – Narrow	0.40	1.01	1.41	2
Three – Narrow	0.67	0.89	1.56	1
Four	0.99	0.85	1.84	1
Four – Option A	0.92	1.07	1.99	1
Four – Option B	0.96	0.85	1.81	1
Four – Option C	0.66	0.81	1.46	2

2.4.6 Wetland Impacts

Wetlands have been identified in the Mill Creek corridor at the SR-212/Telegraph Street bridge crossing. There are approximately 6,000 square feet of wetlands within the project study area. Because they are important to so many resources (wildlife, water resources, and vegetation), it was determined that a disturbance of more than 5 percent (300 square feet) would be the threshold for rating the wetland impacts by alternative. Impacts to wetlands were assessed based on the area of wetlands in square feet that would be permanently removed by the completed proposed action and rated on the following scale:

1 450 or more square feet
2 400 – 450 square feet

3 350 – 400 square feet
4 300 – 350 square feet
5 Less than 300 square feet of wetlands

The results of the evaluation are summarized in **Table 2.5.**

Table 2.5 - Wetland Impacts

Alternative	Impacts Mill Creek Wetlands (Square Feet)	Rating
No Build	0	5
One	428	2
One-Narrow	346	4
Two	462	1
Two-Narrow	390	3
Three-Narrow	390	3
Four	1639	1
Four – Option A	1639	1
Four – Option B	1639	1
Four – Option C	458	1

2.4.7 Impacts to Historic Buildings or Properties

Historic buildings and properties are an attribute that is important to Washington City, which is interested in maintaining and developing the area along Telegraph Street between 500 West and 300 East as a pedestrian-oriented Historic Downtown. Because the loss of an historic building, or property associated with an historic building, is considered a significant impact to the downtown area, this criterion was given a weighted factor of two.

Ratings were assigned based on the number of historic buildings (listed or eligible) that would need to be relocated or that would be impacted by a minor ROW acquisition of 0.05 acres or larger (see section 3.17.3). Listed properties are those regions, sites, buildings, or structures that are on the National Register of Historic Places (NRHP). Eligible regions, sites, buildings, or structures have been identified through surveys as eligible to be listed on the NRHP, but are not currently listed. Although the Mill Creek Bridge was identified as an historically eligible property, it was not included in this

screening table because it would be replaced under every Build alternative. Screening was conducted based on the following rating scale:

1 4 potential relocations and/or up to 8 or more parcels impacted by minor ROW acquisitions 0.05 acres or larger
2 3 potential relocations and/or up to 6 parcels impacted by minor ROW acquisitions 0.05 acres or larger
3 2 potential relocations and/or up to 4 parcels impacted by minor ROW acquisitions 0.05 acres or larger
4 1 potential relocation and/or up to 2 parcels impacted by minor ROW acquisitions 0.05 acres or larger
5 0 potential relocations and/or 0 parcels impacted by minor ROW acquisitions 0.05 acres or larger

The results of the evaluation are summarized in **Table 2.6.**

Table 2.6 - Impacts to Historic Buildings

Alternative	Listed or Eligible Historic Building Relocations (Potential)	Number of Parcels Impacted by a Minor ROW Acquisition 0.05 acres or larger	Unweighted Rating	Weighted Rating
No Build	0	0	5	10
One	2	3	3	6
One – Narrow	1	3	3	6
Two	2	2	3	6
Two – Narrow	1	3	3	6
Three – Narrow	0	3	4	8
Four	0	0	5	10
Four – Option A	0	0	5	10
Four – Option B	0	0	5	10
Four – Option C	0	0	5	10

2.4.8 Summary of Alternatives Screening Process

The July, 2006 Stakeholder Committee meeting concluded with the group's review and discussion of the overall screening process, and comparison of the quantitative totals (Relocation, Right-of-Way, and Impacts to Nisson Park) and ratings (Purpose and Need)

for all of the project alternatives. Based on that review and discussion, the group concluded that Alternative 3 - Narrow had the lowest overall potential impacts and, therefore, the highest overall rating. Accordingly, the group recommended that Alternative 3 – Narrow be designated as the Preferred Alternative.

Table 2.7 summarizes the results of the alternatives screening process for the SR-212/Telegraph Street project. The summary reflects both the conclusions of the Stakeholder Committee at its July, 2006 meeting, and the updated criteria and evaluations conducted by staff and reviewed by the agency project team. Of the Build alternatives, Alternative 3 – Narrow received the highest overall rating and is recommended as the Preferred Alternative.

Table 2.7 – Screening Process Summary: Ratings by Alternative

Alternative	Purpose and Need	Nisson Park	Potential Relocations	ROW	Wetlands	Historic Buildings or Properties	Total
No Build	3	5	5	5	5	10	33
One	11	5	1	1	2	6	26
One – Narrow	11.5	5	3	2	4	6	31.5
Two	11	5	2	1	1	6	26
Two – Narrow	11.5	5	3	2	3	6	30.5
Three – Narrow	12.5	5	3	1	3	8	32.5
Four	7	3	1	1	1	10	23
Four – Option A	7	3	2	1	1	10	24
Four – Option B	7	3	3	1	1	10	25
Four – Option C	7	5	2	2	1	10	27

2.5 Alternatives Considered but Eliminated from Further Consideration

As a result of the alternatives screening process, it was determined that Alternative Four would not be carried forward for further analysis in this EA. Alternative Four, along with its associated options, does not meet the Purpose and Need of the Telegraph Street project because it would not improve safety. In fact, Alternative Four may create new safety concerns resulting from the additional traffic routed onto 100 South and the

resulting increased congestion in the area. In addition, Alternative Four would have a negative effect on the community by making it more difficult for residents in adjoining neighborhoods to reach businesses in the Historic Downtown area. Finally, the traffic movements imposed by the one-way couplet have the potential to frustrate both businesses and customers and potentially encourage some businesses to relocate outside of the Historic Downtown.

Alternatives were considered along 100 North, but not fully developed or put through the screening process for several reasons. 100 North is not currently a through street from 500 West to 300 East. If a wider road were constructed along 100 North, it would require the construction of a new bridge over Mill Creek. There would need to be a completely new road constructed from 500 West over Mill Creek to 300 West. Any alternative along 100 North would require the potential relocation of City Hall as 100 North, if it continued all the way to 300 East, would bisect City Hall. There are also many residences along 100 North, and because this is an older area of Washington City, it is likely that a Build alternative along 100 North would impact several historic buildings. The 100 North alternative would also not meet the Purpose and Need for the project, and it would likely cause extraordinary community disruption.

2.6 Transportation System Management/Transportation Demand Management Alternative

A Transportation System Management (TSM) / Transportation Demand Management (TDM) Alternative was not developed for this proposed project, because Telegraph Street does not have a major transportation system at this time. There are two traffic signals along this section of road that can be coordinated; however, the benefits of coordinating only two signals would be minimal.

The success of TDM programs has typically been tied to promotion and support by major employers. No such large employers are established within the Telegraph Street project study area. While some areas of employment do exist to the west of the project study area, no large employer that would directly affect Telegraph Street is expected.

The Purpose and Need for this proposed action is to improve safety, increase capacity, and provide opportunity for community enhancement. A TSM/TDM alternative alone would not meet the Purpose and Need for this project.

2.7 Future Transportation Conditions

Traffic projections provided by UDOT are the basis for the determining the future volumes used in this study. The information from UDOT projected the year 2030 to have an ADT of approximately 29,000. Based on the information provided by UDOT, future traffic volumes by movement were determined based on projecting the existing traffic data by 2.6 percent each year.

A LOS analysis was performed for the corridor for year 2030 assuming no improvements will be made. If no improvements are made (No Build alternative), the signalized intersections will reach a LOS D or F, as shown in **Table 1.3** (the analysis assumed the 500 West intersection would be signalized in 2030); all of the unsignalized intersection will reach a LOS F, as shown in **Table 1.4.**

For Alternatives One, Two, and Three (standard or narrow options), the improvement to LOS will be the same. The only difference will be as to the final location of raised medians, which will determine what intersections will operate as right-in/right-out only. It is anticipated that the intersections that accommodate left-turning traffic will be signalized. Under these conditions, all intersections will operate at a LOS C or better in 2030.

2.8 Related Actions

Washington City adopted the Washington City Transportation Master Plan in December 2005. This plan identified projects within the area of the Telegraph Street proposed project that could be related to this proposed project. Those projects are summarized below and shown in **Figure 3.6**.

The 5-year Transportation Improvement Plan (TIP) identifies Telegraph Street from 700 West to 300 East as a recommended transportation improvement project. The focus of the current Telegraph Street project is 500 West to 300 East, as the roadway from 700 West to 500 West is already four lanes wide with a center turn lane and does not need to be widened or improved at this time.

2.8.1 300 East from Telegraph Street to the Virgin River

The 5-year TIP identified 300 East from Telegraph Street to the Virgin River as a necessary project to upgrade the existing road surface and geometrics, as well as provide adequate roadway capacity for the residential development south of the Virgin River. The 300 East project intersects Telegraph Street at the east end of the project area.

2.8.2 Washington Parkway Extension from Telegraph Street to Washington Dam Road

An extension of the Washington Parkway is recommended as a long-range (10-20 year) transportation project. This project would connect to Telegraph Street east of the project study area. This major collector is necessary to provide direct access to I-15 at the MP 13 interchange. The portion of the Washington Parkway from Telegraph Street to the I-15 interchange has already been constructed. The new stretch of Washington Parkway is an important element of the transportation system, providing motorists in the vicinity of Long Valley an alternative route for shorter trips to I-15 and Telegraph Street.

It is likely that the Washington Parkway Extension project will increase traffic on Telegraph Street when motorists have improved access to the shopping areas of downtown.

2.8.3 Other Related Actions

Other projects that could affect, or be affected by, the Telegraph Street proposed project include:

- Completion of the north and south frontage roads between Main Street and the MP 13 interchange will allow additional east-west movement through the City that avoids Telegraph Street.
- The Mill Creek Parkway will connect from 300 West to Green Springs Drive. The parkway will allow future residents of the South Fields to reach the MP 10 commercial area without having to travel on Telegraph Street.
- Construction of the Mall Drive Bridge will provide another route for South Fields residents to reach the Red Cliffs Mall and the MP 10 commercial area, which will relieve traffic on 300 West and Telegraph Street.

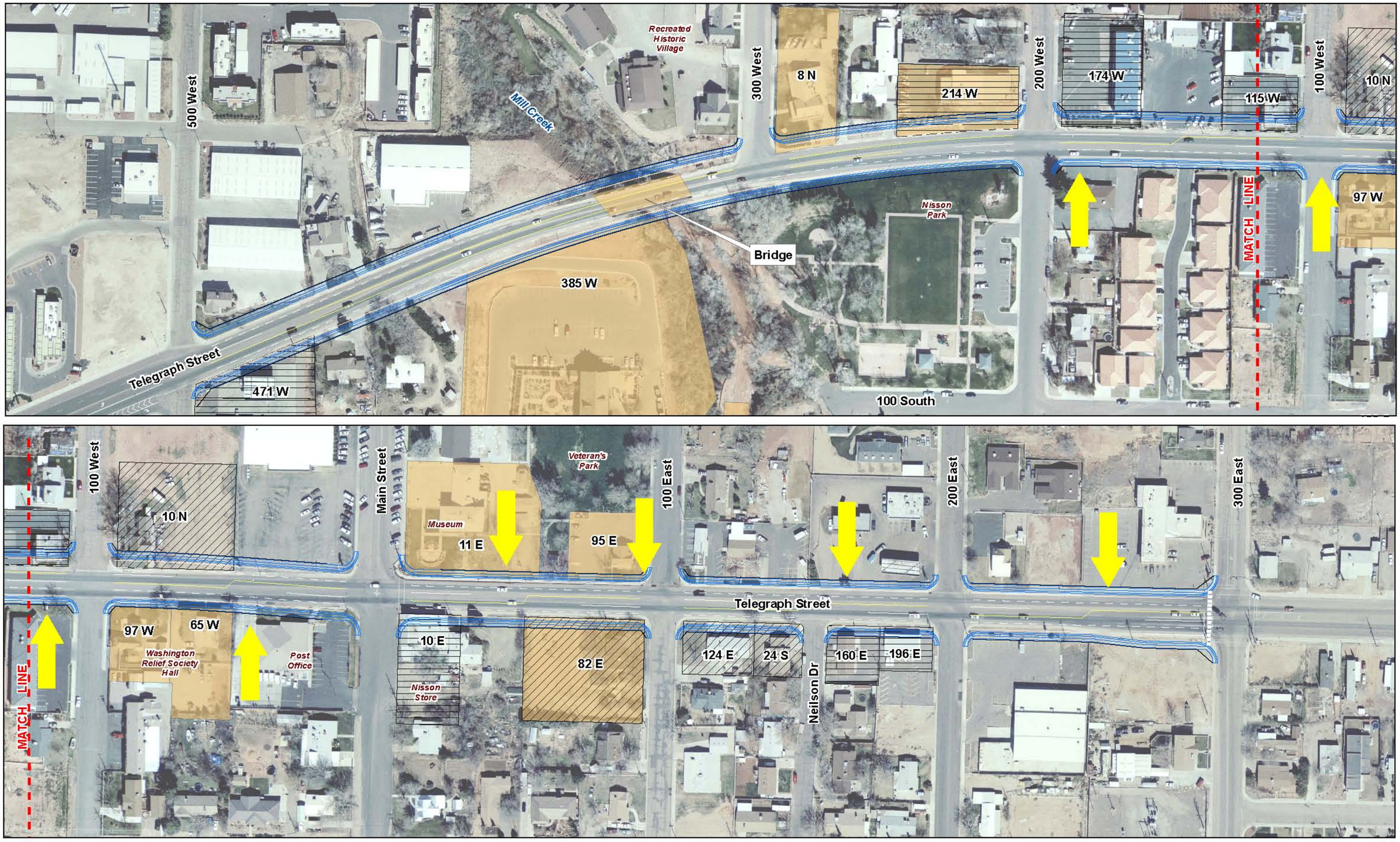

Figure 2.1
Alternative One

STANDARD WIDTH TYPICAL SECTION

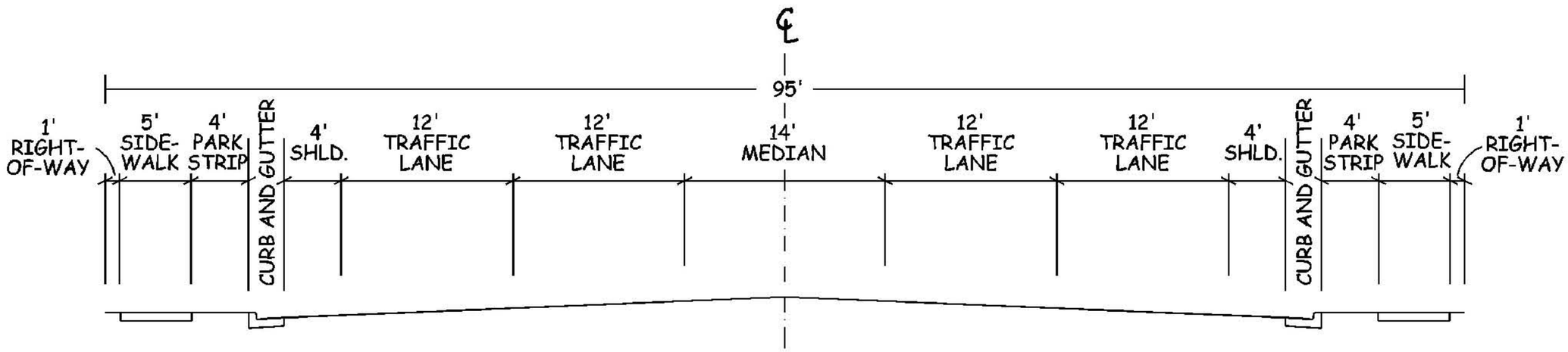

Figure 2.2
Standard Width Typical Section

Figure 2.3
Alternative One - Narrow Option

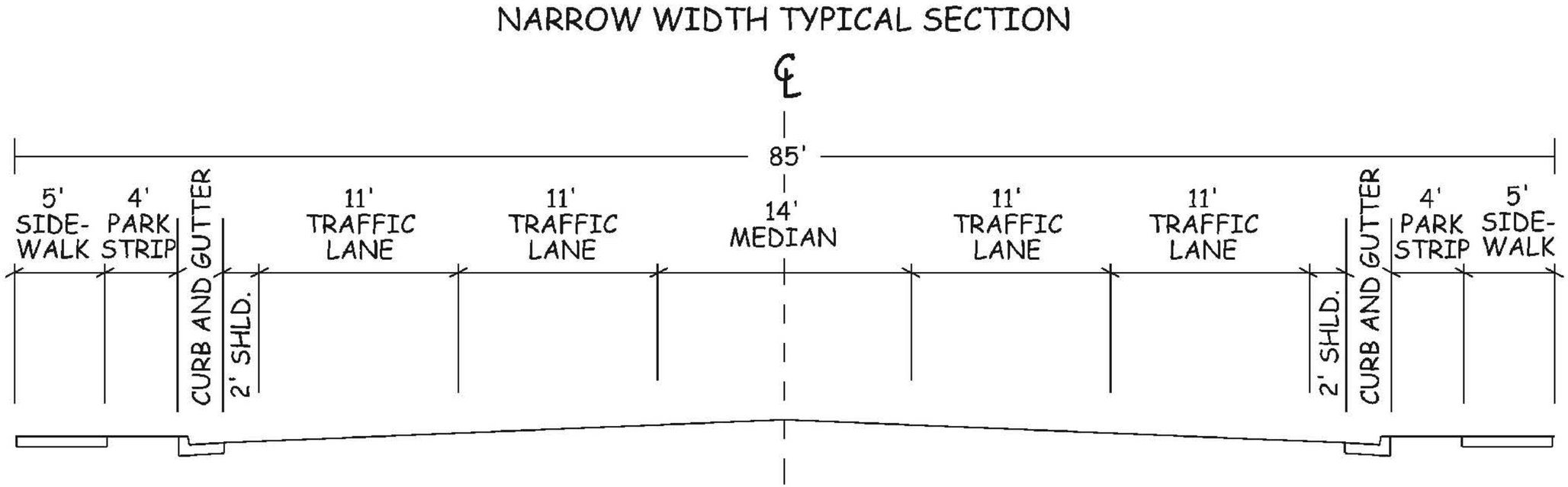

Figure 2.4
Narrow Width
Typical Section

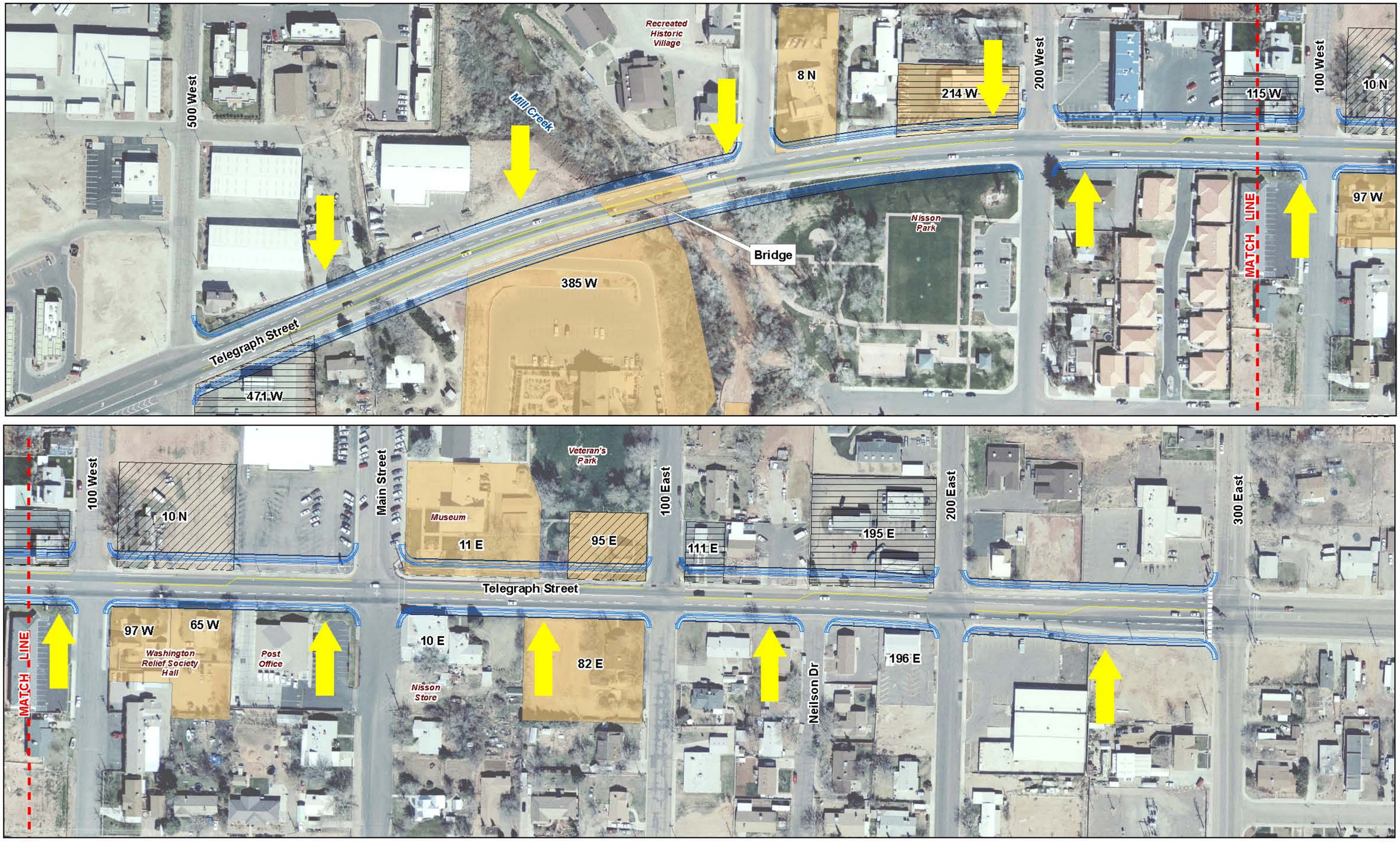

Figure 2.5
Alternative Two

Figure 2.6
Alternative Two - Narrow Option

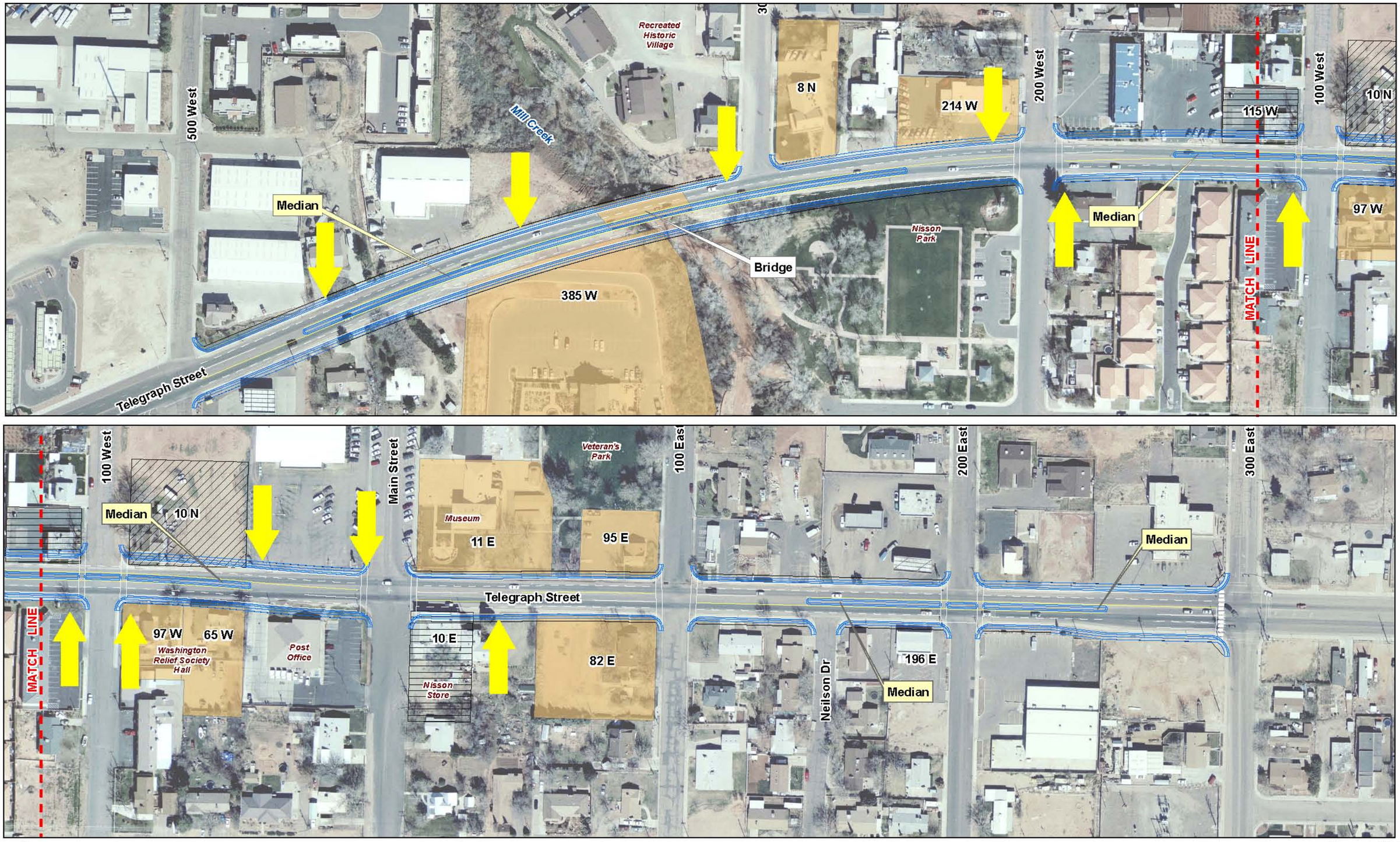

Figure 2.7
Alternative Three - Narrow Option

500 West
Mill Creek
8 N
214 W
Telegraph Street
10 N
97 W
65 W
Post Office
Nisson Park
Bridge
200 West
100 West
MATCH LINE
385 W
471 W
Washington Cotton Factory
100 South
121 W
11 E
95 E
Telegraph Street
See Figure 2.9 for Option A Detail
97 W
65 W
Washington Relief Society Hall
Post Office
10 E
82 E
Nisson Store
Main Street
100 East
Neilson Dr
196 E
200 East
300 East
39 S
317 Palo Verde Drive
312 Palo Verde Drive
MATCH LINE
71 S
See Figure 2.10 for Option B Detail
100 South
113 S
76 E
120 E
184 E
110 S

N W E S

UDOT

0 250 Feet

Historic Property

Potential Relocation of Residence (Within 15 Feet of Residential)

Potential Relocation of Business (Severely Limiting Business Use)

TELEGRAPH STREET ENVIRONMENTAL ASSESSMENT

Figure 2.8
Alternative Four

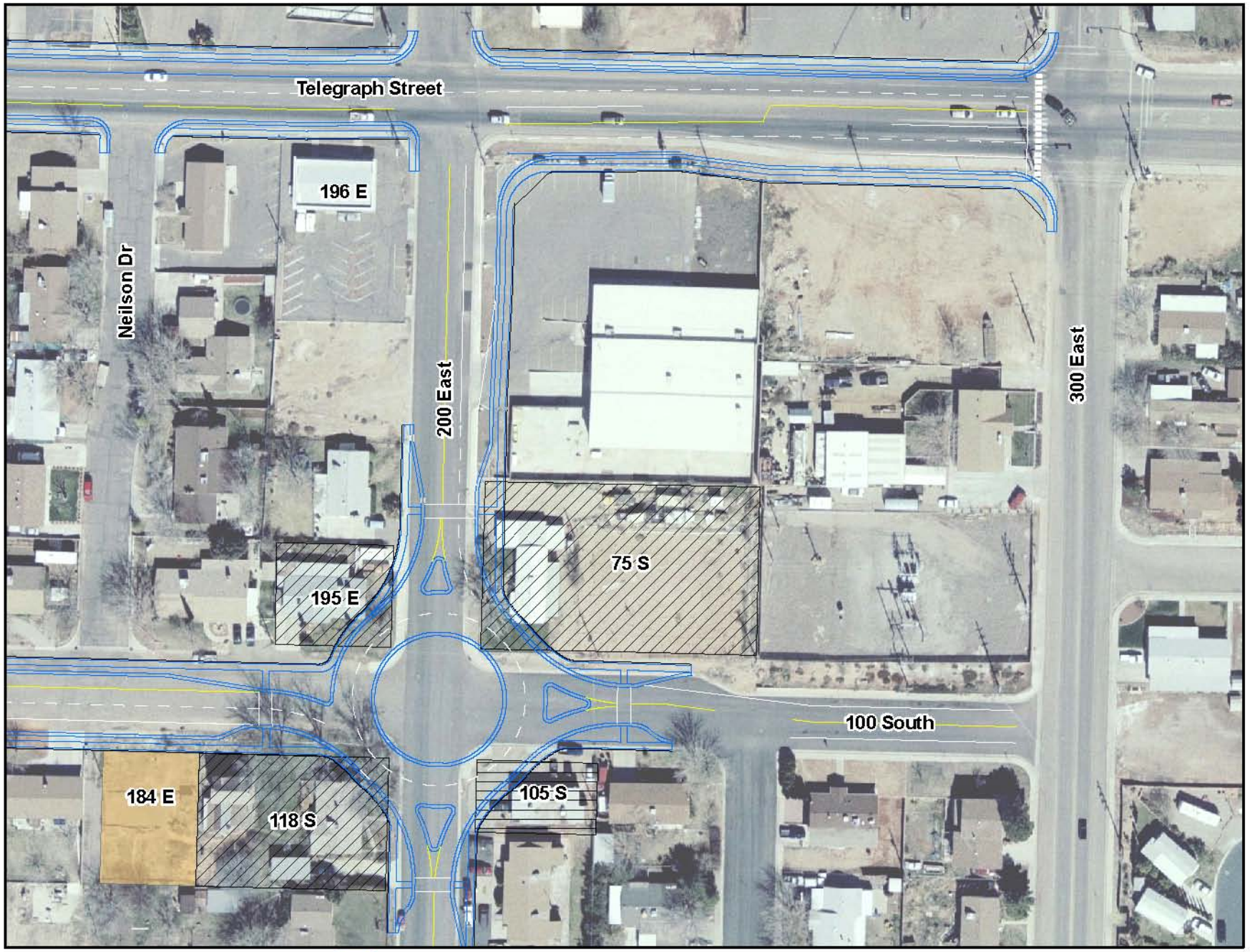

Figure 2.9
Alternative Four -
Option A Detail

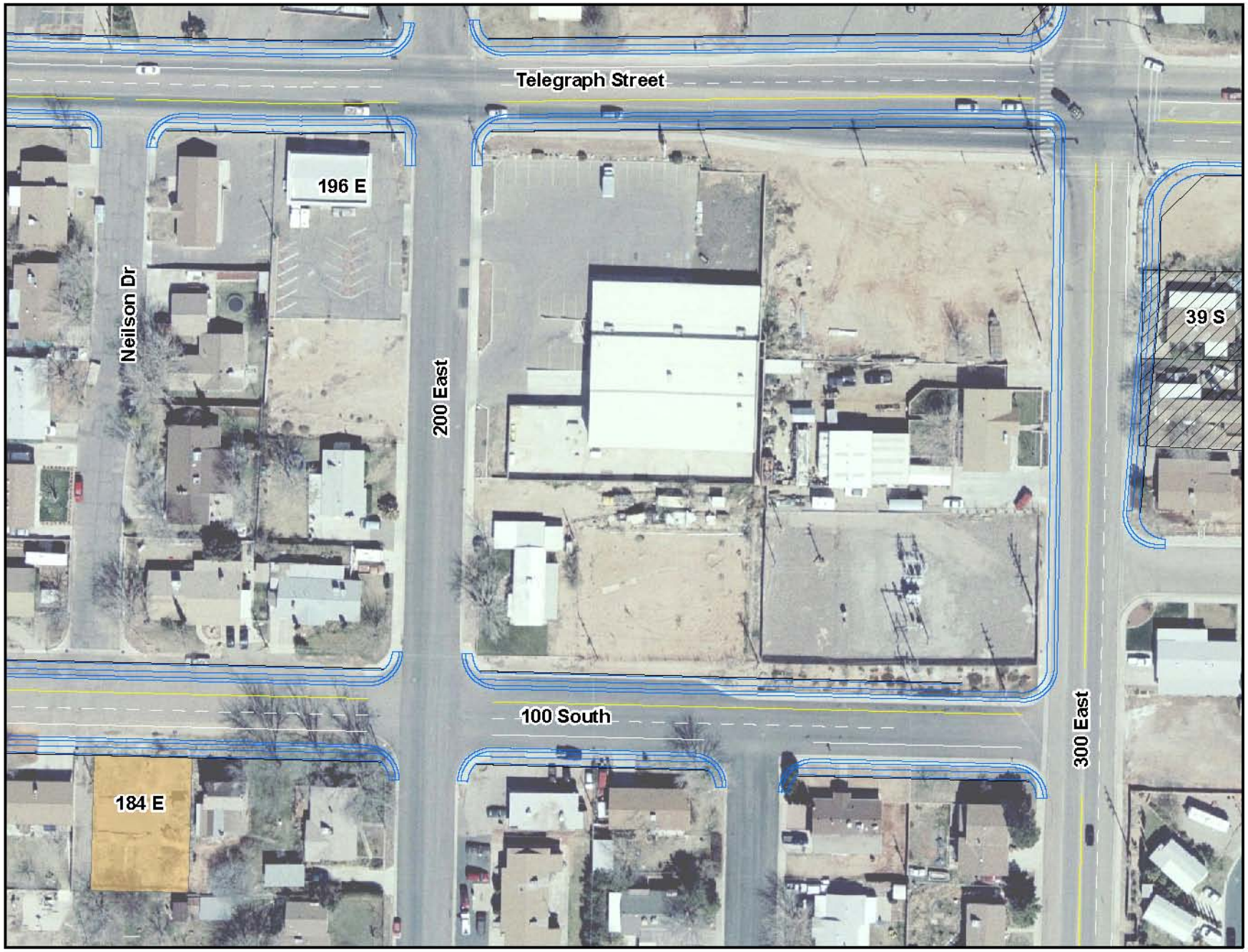

Figure 2.10
Alternative Four - Option B Detail

Figure 2.11
Alternative Four - Option C